PONDEROSA MOBILE HOME PARK (PWSNO 1090059) SOURCE WATER ASSESSMENT REPORT

April 23, 2002



State of Idaho Department of Environmental Quality

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Executive Summary

Under the Safe Drinking Water Act Amendments of 1996, all states are required by the U.S. Environmental Protection Agency to assess every source of public drinking water for its relative sensitivity to contaminants regulated by the act. This risk assessment is based on a land use inventory in the well recharge zone, sensitivity factors associated with how the well was constructed, and aquifer characteristics.

This report, *Source Water Assessment for Ponderosa Mobile Home Park*, describes the public drinking water wells; the well recharge zone and potential contaminant sites located inside the recharge zone boundaries. This assessment, taken into account with local knowledge and concerns, should be used as a planning tool to develop and implement appropriate protection measures for this public water system. The results should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the water system.

Ponderosa Mobile Home Park drinking water is supplied by 3 wells drawing water from a small aquifer in the vicinity of Sagle, Idaho. The system currently serves 42 households located west of Highway 95 between Sagle and Gun Club Roads. Historically, Ponderosa Mobile Home Park has had few water quality problems. A groundwater Susceptibility Analysis conducted by DEQ April 2, 2002 found the wells to be moderately susceptible to contamination, mostly because of natural risk factors associated with local geology.

This assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

The water system is well run and in compliance with *Idaho Rules For Public Drinking Water Systems*. The park owns the land around its wells and restricts activity that could potentially contaminate the wells. Atmospheric vacuum breakers are installed on most of the homes in the park to prevent cross connections. The only other apparent pathway for back siphonage during periods of low pressure is through lawn sprinklers.

Because the park may not have direct jurisdiction over the entire recharge zone delineated for its wells, it will be important to form partnerships with neighboring landowners, businesses and state and local agencies to protect the ground water the Sagle community relies on.

Due to the time involved with the movement of ground water, source water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term. For assistance in developing protection strategies, please contact the Coeur d'Alene Regional office of the Department of Environmental Quality or the Idaho Rural Water Association.

SOURCE WATER ASSESSMENT FOR PONDEROSA MOBILE HOME PARK

Section 1. Introduction - Basis for Assessment

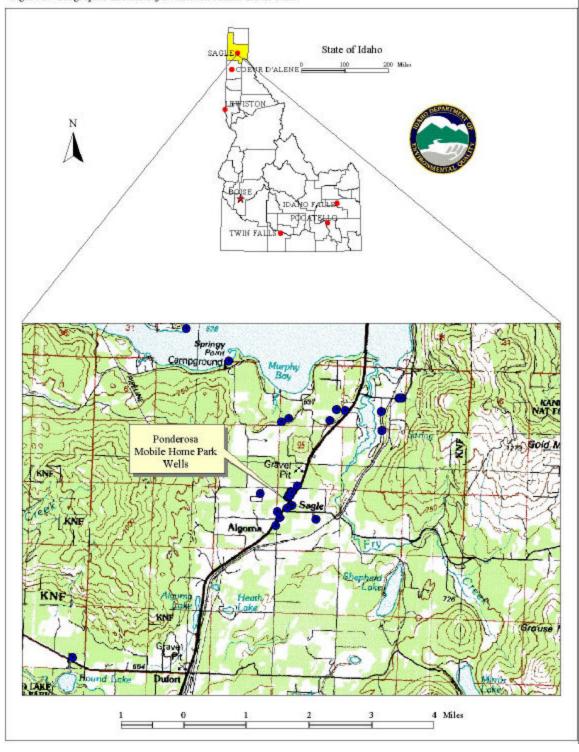
The following sections contain information necessary for understanding how and why this assessment was conducted. **It is important to review this information to understand what the ranking of this source means.** A map showing the delineated source water assessment area and an inventory of significant potential sources of contamination identified within that area are included. The ground water susceptibility analysis worksheets used to develop this assessment are attached.

Level of Accuracy and Purpose of the Assessment

The Idaho Department of Environmental Quality (DEQ) is required by the U.S. Environmental Protection Agency (EPA) to assess every public drinking water source in Idaho for its relative susceptibility to contaminants regulated by the Safe Drinking Water Act. These assessments are based on a land use inventory inside the delineated recharge zones, sensitivity factors associated with how the well is constructed, and aquifer characteristics. The state must complete more than 2900 assessments by May of 2003. Because resources and the time available to accomplish assessments are limited, an in-depth, site-specific investigation for every public water system is not possible.

The results of the source water assessment should <u>not be</u> used as an absolute measure of risk and they should <u>not be</u> used to undermine public confidence in the water system. The ultimate goal of this assessment is to provide data to local communities for developing a protection strategy for their drinking water supply. The Idaho Department of Environmental Quality recognizes that pollution prevention activities generally require less time and money to implement than treating a public water supply system once it has been contaminated. DEQ encourages communities to balance resource protection with economic growth and development. The decision as to the amount and types of information necessary to develop a source water protection program should be determined by the local community based on its own needs and limitations. Wellhead or source water protection is one facet of a comprehensive growth plan, and it can complement ongoing local planning efforts.

Figure 1. Geographic Location of Ponderosa Mobile Home Park



Section 2. Preparing for the Assessment

Defining the Zones of Contribution - Delineation

The delineation process establishes the physical area around a well that will become the focal point of the assessment. The process includes mapping the boundaries of the well recharge area into time of travel zones indicating the number of years necessary for a particle of water to reach a well. DEQ used a refined computer model approved by the EPA to determine the time of travel (TOT) for water the Ponderosa Mobile Home Park well pumps from the Sagle aquifer. The computer model used data assimilated by DEQ from a variety of sources including local well logs and the report *Steady State Simulation of Nutrient and Contaminant Transport in the Southside Aquifer Near Sagle, Idaho* prepared by J-U-B Engineers, Inc. for Southside Water and Sewer District.

The Ponderosa Mobile Home Park community water system serves a population of about 100 people in the vicinity of Sagle, Idaho (Figure 1). Water for the park's customers is supplied by 3 wells. Well #1 is reportedly 286 feet deep and has a capacity of 60 GPM. It has been used as a back up source since earthquake damaged to the well caused a turbidity problem. Well #2 is about 100 feet deep and produces 14 GPM. Well #3, drilled in 1998 to a depth of 107 feet, produces 59 GPM and is the primary source for the park.

The delineated well recharge zone delineated for the Ponderosa Mobile Home Park wells covers only 7.9 acres. The delineation is at most about 950 feet long and is divided into 0-3, 3-6 and 6-10-year time of travel zones. The primary direction of ground water flow is from south to north (Figure 2).

Identifying Potential Sources of Contamination

The goal of the inventory process is to locate and describe those facilities, land uses, and environmental conditions that are potential sources of ground water contamination. Inventories for public water systems in Idaho were conducted in two-phases. The first phase involved identifying and documenting potential contaminant sources inside individual source water assessment areas through the use of computer databases and Geographic Information System maps developed by DEQ. The maps and inventory lists were then sent to system operators for verification and correction in the second or enhanced part of the inventory process.

Figure 2, *Ponderosa Mobile Home Park Delineation and Potential Contaminant Inventory* on page 7 of this report shows the location of the Ponderosa Mobile Home Park wells, and the zone of contribution DEQ delineated for them. Land use inside the delineation boundaries is mostly residential with some light commercial development adjacent to the highway. State Highway 95 crosses the eastern portions of the 3-6 and 6-10-year time of travel zones.

Many potential sources of contamination are regulated at the federal level, state level, or both to reduce the risk of release. When a business, facility, or property is identified as a potential contaminant source, this should not be interpreted to mean that this business, facility, or property is in violation of any local, state, or federal environmental law or regulation. What it does mean is that the <u>potential</u> for contamination exists due to the nature of the business, industry, or operation.

Section 3. Susceptibility Analysis

The susceptibility to contamination of all groundwater sources in Idaho is being assessed on the following factors:

- physical integrity of the well,
- hydrologic characteristics,
- land use characteristics, and potentially significant contaminant sources
- historic water quality

The susceptibility rankings are specific to a particular potential contaminant or category of contaminants. A high susceptibility rating relative to one potential contaminant does not mean that the water system is at the same risk for all other potential contaminants. The relative ranking that is derived for each well is a qualitative, screening-level step that, in many cases, uses generalized assumptions and best professional judgement. The following summaries describe the rationale for the susceptibility ranking. The Susceptibility Analysis Worksheets in Attachment A show in detail how the Ponderosa Mobile Home Park wells scored.

Well Construction

Well construction directly affects the ability of the wells to protect the aquifer from contaminants. Lower scores imply a well that can better protect the water. This portion of the susceptibility analysis relies on information from individual well logs and from the most recent sanitary survey of the public water system. Well logs for Ponderosa Mobile Home Park Wells #1 and #2 are not on file with DEQ. A sanitary survey of the system was conducted in November 2001.

Well #1 was drilled at an unknown date to a reported depth of 286 feet. Well #2 is reported to be100 feet deep. Details about the surface seal depth and other factors used to assess the integrity of the wells are unknown since the well logs are not available. The November 2001 sanitary survey noted no deficiencies in well head and surface seal maintenance.

Well #3 has a 19 foot-deep deep bentonite clay surface seal that terminates in a soil stratum of mixed sand and gravel. The 6-inch steel casing extends from three feet above ground to a depth of 98 feet, passing through a clay lens between 36 and 39 feet below ground. A telescoping stainless steel well screen is set from 97 to 107 feet below the surface. The static water level in the well is at 58 feet. Ground water was first encountered in a fine sand layer immediately below the clay lens.

116934" 116 3330 48 12/30 WELL #1 WELL #2 WELL #3 Drainfield Sagle Road 116034 116 33'30 2000 Feet Legend Time of Travel Zones SARA TEL III, SE (EPCRA) 2 - 6 Year PWS # 1090059 Ponderosa Mobile Home Park RED ES SEA Wasteward Land App. Ske Wells #1, #2, #3

Figure 2. Ponderosa Mobile Home Park Delineation and Potential Contaminant Inventory.

Hydrologic Sensitivity

The hydrologic sensitivity scores for the Ponderosa Mobile Home Park well are 6 points out of 6 points possible. The scores reflect natural geologic conditions and in the recharge zone as a whole and at the well sites. Soils in the capture zone delineated for the wells are generally moderately well drained to well drained. Poorly drained to moderately well drained soils are deemed more protective of ground water than soils which drain faster. The depth to ground water in all the wells is less than 300 feet. The soil column above a deeper water table provides some protection from potential contaminants through adsorption and other mechanisms.

The driller's report for Well #3 logs documents permeable sand and gravel soils for the first 36 feet below the surface, then a 3 foot deep clay lens immediately above the water table. The soil profiles in Well #1 and Well #2 are not known.

Potential Contaminant Sources and Land Use

Land inside the Ponderosa Mobile Home Park well recharge zone is mostly residential, with some light commercial development paralleling Highway 95. A septic drainfield is located about 200 feet southwest of the nearest well near the boundary between the 0-3 and 3-6 year time of travel zones. For the purposes of the susceptibility analysis, community septic systems are counted as potential sources of contamination. Individual systems do not affect the score in this portion of the analysis unless their density exceeds 10 in 40 acres. Highway 95, crossing the 3-6 and 6-10-year time of travel zones, is the only significant potential source of contaminants documented inside the delineation boundaries.

Table 1. Ponderosa Mobile Home Park Potential Contaminant Inventory

SITE DESCRIPTION	POTENTIAL	TIME OF TRAVEL	SOURCE OF
	CONTAMINANTS ¹	ZONE	INFORMATION
Drainfield	IOC, Microbial	0-3 year	Public Water System
			Files
Highway 95	IOC, SOC, VOC	3-6 and 6-10 year	USGS Map
	Microbial		

¹ IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

Historic Water Quality

Historically, Ponderosa Mobile Home Park has had few water quality problems. The system collects one routine sample monthly for bacterial testing. Positive samples in September 2001 and December 1997 may have been due to work being done on the water system. The source of bacteria present in samples collected in August 1998 and October 1996 is not known. No positive samples have been confirmed in follow up testing. Chemical and radiological test results for the park are summarized on the table below.

Table 2. Ponderosa Mobile Home Park Test Results

Primary IOC Contaminants (Mandatory Tests)												
Contaminant	MCL (mg/l)	Results (mg/l)	Dates			Contaminant	MCL (mg/l)	Results (mg/l)		Dates		
Antimony	0.006	ND	12/1	8/79 to 4/12/0	1	Nitrate	10	ND to 2.0		7/21/83 to 4/12/01		
Arsenic	0.01	0.003	4/12	/01		Nickel	N/A	ND		12/18/79 to 4/12/01		
Barium	2.0	0.04	12/9	/98, 4/12/01		Selenium	0.05	ND		12/18/79 to 4/12/01		
Beryllium	0.004	ND	12/1	8/79 to 4/12/0	1	Sodium	N/A	5.32 to7.7		6/27/88 to 12/9/98		
Cadmium	0.005	ND	12/1	8/79 to 4/12/0	1	Thallium	0.002	ND		12/18/79 to 4/12/01		
Chromium	0.1	ND	12/1	8/79 to 4/12/0	1	Cyanide	0.02	ND		12/18/79 to 4/12/01		
Mercury	0.002	ND	12/1	8/79 to 4/12/0	1	Fluoride	4.0	0.3,	0.4	12/9/98, 4/12/01		
		Second	ary a	nd Other IO	$\mathbf{C} \mathbf{C}$	Contaminants (Optiona	ıl Tes	ts)			
Contaminan	t Re	ecommende	d		F	Results (mg/l) Date			Dates	es		
	Ma	ximum (mg	/l)									
Calcium				29.0, 61.4					4/27/88, 12/9/98			
Iron			0.19				12/9/98					
Manganese			0.15				12/9/98					
Sulfate			10.7 to 14.3						12/9/98 to 4/12/01			
			ted a	and Unregula	ted	Synthetic Org	anic Ch	emic	als			
Contaminant					Results Dates			Dates				
29 Regulated and 13 Unregulated Synthetic Organic			etic Organic		None Detected 9/22/93 to 4/12/01			/93 to 4/12/01				
	Co	mpounds										
			ated	and Unregul	ated	l Volatile Orga	nic Che	mica	ls			
Contaminant				Results			Dates					
21 Regulated And 16 Unregulated Volatile Organic			None Detected 410/91 to 4/12/01			91 to 4/12/01						
Compounds												
Radiological Contaminants												
Contaminant			MC		-		Dates					
Gross Alpha, Including Ra & U 15 pC/l					8/7/86 to 12/9/98							
Gross Beta Particle Activity 4 mrem/year			rem/year	0.9	to 2.6 mrem	8/7/86 to 12/9/98						

Final Susceptibility Ranking

The Ponderosa Mobile Home Park wells ranked moderately susceptible to all classes of regulated contaminants. Risk factors associated with local geology added the most points to the final susceptibility scores. Unknown characteristics of Well #1 and Well #2 were scored conservatively.. Final scores and ranking relative to each class of contaminant are summarized on Table 3. The complete analysis worksheets for the wells can be found in Attachment A.

The final scores for the susceptibility analysis were determined using the following formulas:

- 1) VOC/SOC/IOC Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.2)
- 2) Microbial Final Score = Hydrologic Sensitivity + System Construction + (Potential Contaminant/Land Use x 0.375)

The final ranking categories are as follows:

- 0 5 Low Susceptibility
- 6 12 Moderate Susceptibility
- > 13 High Susceptibility

Table 3. Summary of Ponderosa Mobile Home Park Susceptibility Evaluation

Final Susceptibility Scores/ Ranking							
IOC VOC SOC Microbial							
Well #1	11/Moderate	11/Moderate	11/Moderate	11/Moderate			
Well #2	11/Moderate	11/Moderate	11/Moderate	11/Moderate			
Well #3	9/Moderate	9/Moderate	9/Moderate	9/Moderate			

IOC = inorganic chemical, VOC = volatile organic chemical, SOC = synthetic organic chemical

HIGH* - Indicates source automatically scored as high susceptibility due to presence of bacteria or a VOC, SOC or an IOC above the maximum contaminant level in the tested drinking water

Section 4. Options for Source Water Protection

The susceptibility assessment should be used as a basis for determining appropriate new protection measures or re-evaluating existing protection efforts. No matter what the susceptibility ranking a source receives, protection is always important. Whether the source is currently located in a "pristine" area or an area with numerous industrial and/or agricultural land uses that require education and surveillance, the way to ensure good water quality in the future is to act now to protect valuable water supply resources.

Ponderosa Mobile Home Park operates and maintains its water system in compliance with *Idaho Rules for Public Drinking Water Systems*. The park owns the land around its wells and restricts activity that could potentially contaminate the wells. Atmospheric vacuum breakers are installed on most of the homes in the park to prevent cross connections. The only other apparent pathway for back siphonage during periods of low pressure is through lawn sprinklers.

Because part of the delineated capture zone for the wells may be outside the direct jurisdiction of Ponderosa Mobile Home Park, working with the Bonner County Planning and Zoning board and other public drinking water systems drawing from the Sagle Aquifer to establish a wellhead protection overlay zone is probably the most effective way to prevent contamination due to land use changes in the area.

In its own service area and in the capture zone for the wells, the system should promote ground water stewardship programs. Home*A*Syst and Farm*A*Syst for example are voluntary programs that help people assess environmental risks on their property and find technical support for making needed changes. The Internet has dozens of sites devoted to ground water stewardship programs that are tailored various age groups. 4H clubs in the area may be interested in undertaking water protection activities as a service project. The County Extension office is a resource for workshops devoted to topics like septic tank maintenance and household use of pesticide, herbicides and fertilizer that would be useful in a rural neighborhood.

Partnerships with state and local agencies, businesses in the capture zone and neighboring landowners should also be established. Some of them may not be aware that their property is in a sensitive area where household, agricultural or business practices could have a negative impact on water quality for the whole community. Due to the time involved with the movement of ground water, drinking water protection activities should be aimed at long-term management strategies even though these strategies may not yield results in the near term.

Assistance

Public water suppliers and users may call the following IDEQ offices with questions about this assessment and to request assistance with developing and implementing a local protection plan. In addition, draft protection plans may be submitted to the IDEQ office for preliminary review and comments.

Coeur d'Alene Regional DEQ Office (208) 769-1422

State IDEQ Office (208) 373-0502

Website: http://www.deq.state.id.us

Water suppliers serving fewer than 10,000 persons may contact John Bokor, Idaho Rural Water Association, at (208) 343-7001 for assistance with wellhead protection strategies.

References Cited

Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, 1997. "Recommended Standards for Water Works."

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Idaho Division of Environmental Quality, 1994. Ground Water and Soils Reconnaissance of the Lower Payette Area, Payette County, Idaho. Ground Water Quality Technical Report No. 5. Idaho Division of Environmental Quality. December 1994.

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United States Geological Survey, 1986. Quality of Ground Water in the Payette River Basin, Idaho. United States Geological Survey. Water Resources Investigation Report 86-4013.

University of Idaho. 1986. Ground Water Resources in a Portion of Payette County, Idaho. Idaho Water Resources Research Institute. University of Idaho. Moscow, Idaho. April 1986.

Attachment A

Ponderosa Mobile Home Park Susceptibility Analysis Worksheets

Ground Water Susceptibility

Ground Water Susceptibility					
Public Water System Name : PONDEROSA MOBILE I	HOME PARK Source	: WELL #1			
Public Water System Number: 1090059	4/2/02	2:08:07 PM			
1. System Construction		SCORE			
Drill Date	UNKNOWN				
Driller Log Available	NO				
Sanitary Survey (if yes, indicate date of last survey)	YES 2001				
Well meets IDWR construction standards	UNKNOWN	1			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to low permeability unit	UNKNOWN	2			
Highest production 100 feet below static water level	UNKNOWN	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		4			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
		IOC	VOC	SOC	Microbia
3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Se	tback)	Score	Score	Score	Score
Land Use Zone 1A	RESIDENTIAL/COMMERCIA	AL 2	2	2	2
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		2	2	2	2
Potential Contaminant / Land Use - ZONE 1B (3 YR. TOT)					
Contaminant sources present (Number of Sources)	NO	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or Microbials	YES	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural La	nd 0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B		0	0	0	0
Potential Contaminant / Land Use - ZONE II (6 YR. TOT)					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or Microbials	YES	1	1	1	
Land Use Zone II	Less than 25% Agricultural Lar	nd 0	0	0	
Potential Contaminant Source / Land Use Score - Zone II		3	3	3	0
Potential Contaminant / Land Use - ZONE III (10 YR. TOT)					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of Zone	NO	0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone III		0	0	0	0
Cumulative Potential Contaminant / Land Use Score		5	5	5	2
4. Final Susceptibility Source Score		11	11	11	11
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

Ground Water Susceptibility

4. Final Susceptibility Source Score

5. Final Well Ranking

PONDEROSA MOBILE HOME PARK Public Water System Name: Source: WELL #2 Public Water System Number: 1090059 4/2/02 2:07:47 PM 1. System Construction SCORE Drill Date UNKNOWN Driller Log Available NO Sanitary Survey (if yes, indicate date of last survey) YES 2001 Well meets IDWR construction standards UNKNOWN Wellhead and surface seal maintained YES 0 Casing and annular seal extend to low permeability unit UNKNOWN Highest production 100 feet below static water level NO Well located outside the 100 year flood plain YES **Total System Construction Score** 2. Hydrologic Sensitivity Soils are poorly to moderately drained 2 NO Vadose zone composed of gravel, fractured rock or unknown YES 1 Depth to first water > 300 feet NO Aquitard present with > 50 feet cumulative thickness NO 2 Total Hydrologic Score 6 IOC VOC SOC Microbial 3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Setback) Score Score Score Score RESIDENTIAL/COMMERCIAL 2 Land Use Zone 1A 2 2 2 Farm chemical use high NO 0 0 0 IOC, VOC, SOC, or Microbial sources in Zone 1A NO NO NO NO NO Total Potential Contaminant Source/Land Use Score - Zone 1A 2 2 2 2 Potential Contaminant / Land Use - ZONE 1B (3 YR. TOT) Contaminant sources present (Number of Sources) YES 0 0 0 0 (Score = # Sources X 2) 8 Points Maximum 0 0 0 Sources of Class II or III leacheable contaminants or Microbials YES 0 4 Points Maximum Zone 1B contains or intercepts a Group 1 Area NO 0 Land use Zone 1B 0 0 0 Less Than 25% Agricultural Land Total Potential Contaminant Source / Land Use Score - Zone 1B 0 0 0 0 Potential Contaminant / Land Use - ZONE II (6 YR. TOT) Contaminant Sources Present YES 2 2 2 Sources of Class II or III leacheable contaminants or Microbials YES Land Use Zone II Less than 25% Agricultural Land 0 0 0 Potential Contaminant Source / Land Use Score - Zone II 3 3 3 0 Potential Contaminant / Land Use - ZONE III (10 YR. TOT) Contaminant Source Present NO 0 0 0 Sources of Class II or III leacheable contaminants or Microbials NO 0 0 0 Is there irrigated agricultural lands that occupy > 50% of Zone NO 0 0 0 Total Potential Contaminant Source / Land Use Score - Zone III 0 0 0 Cumulative Potential Contaminant / Land Use Score 5 5 5 2

05/14/02

11

Moderate

11

Moderate Moderate

11

Moderate

Ground Water Susceptibility

 Public Water System Name :
 PONDEROSA MOBILE HOME PARK
 Source:
 WELL #3

 Public Water System Number :
 1090059
 4/2/02 2:07:28 PM

Public Water System Number: 1090059	4/2/02 2:07:2	28 PM			
1. System Construction		SCORE			
Drill Date	9/15/98				
Driller Log Available	YES				
Sanitary Survey (if yes, indicate date of last survey)	YES 2001				
Well meets IDWR construction standards	YES	0			
Wellhead and surface seal maintained	YES	0			
Casing and annular seal extend to or through low permeability uni	t CASING YES, SEAL NO	1			
Highest production 100 feet below static water level	NO	1			
Well located outside the 100 year flood plain	YES	0			
Total System Construction Score		2			
2. Hydrologic Sensitivity					
Soils are poorly to moderately drained	NO	2			
Vadose zone composed of gravel, fractured rock or unknown	YES	1			
Depth to first water > 300 feet	NO	1			
Aquitard present with > 50 feet cumulative thickness	NO	2			
Total Hydrologic Score		6			
		IOC	VOC	SOC	Microbia
3. Potential Contaminant / Land Use - ZONE 1A (Sanitary Se	tback)	Score	Score	Score	Score
Land Use Zone 1A	RESIDENTIAL/COMMERCIAL	2	2	2	2
Farm chemical use high	NO	0	0	0	
IOC, VOC, SOC, or Microbial sources in Zone 1A	NO	NO	NO	NO	NO
Total Potential Contaminant Source/Land Use Score - Zone 1A		2	2	2	2
Potential Contaminant / Land Use - ZONE 1B (3 YR. TOT)					
Contaminant sources present (Number of Sources)	YES	0	0	0	0
(Score = # Sources X 2) 8 Points Maximum		0	0	0	0
Sources of Class II or III leacheable contaminants or Microbials	YES	0	0	0	
4 Points Maximum		0	0	0	
Zone 1B contains or intercepts a Group 1 Area	NO	0	0	0	0
Land use Zone 1B	Less Than 25% Agricultural Land	0	0	0	0
Total Potential Contaminant Source / Land Use Score - Zone 1B	-	0	0	0	0
Potential Contaminant / Land Use - ZONE II (6 YR. TOT)					
Contaminant Sources Present	YES	2	2	2	
Sources of Class II or III leacheable contaminants or Microbials	YES	1	1	1	
Land Use Zone II	Less than 25% Agricultural Land	0	0	0	
Potential Contaminant Source / Land Use Score - Zone II	-	3	3	3	0
Potential Contaminant / Land Use - ZONE III (10 YR. TOT)					
Contaminant Source Present	NO	0	0	0	
Sources of Class II or III leacheable contaminants or Microbials	NO	0	0	0	
Is there irrigated agricultural lands that occupy > 50% of Zone	NO	0	0	0	
Total Potential Contaminant Source / Land Use Score - Zone III		0	0	0	0
Cumulative Potential Contaminant / Land Use Score		5	5	5	2
4. Final Susceptibility Source Score		9	9	9	9
5. Final Well Ranking		Moderate	Moderate	Moderate	Moderate

POTENTIAL CONTAMINANT INVENTORY LIST OF ACRONYMS AND DEFINITIONS

<u>AST (Aboveground Storage Tanks)</u> – Sites with aboveground storage tanks.

<u>BML</u> (<u>Business Mailing List</u>)— This list contains potential contaminant sites identified through a yellow pages database search of standard industry codes (SIC).

<u>CERCLIS</u> – This includes sites considered for listing under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). CERCLA, more commonly known as Superfund is designed to clean up hazardous waste sites that are on the national priority list (NPL).

<u>Cyanide Site</u> – DEQ permitted and known historical sites/facilities using cyanide.

<u>Dairy</u> – Sites included in the primary contaminant source inventory represent those facilities regulated by Idaho State Department of Agriculture (ISDA) and may range from a few head to several thousand head of milking cows.

<u>Deep Injection Well</u> – Injection wells regulated under the Idaho Department of Water Resources generally for the disposal of stormwater runoff or agricultural field drainage.

Enhanced Inventory – Enhanced inventory locations are potential contaminant source sites added by the water system. These can include new sites not captured during the primary contaminant inventory, or corrected locations for sites not properly located during the primary contaminant inventory. Enhanced inventory sites can also include miscellaneous sites added by the Idaho Department of Environmental Quality (DEQ) during the primary contaminant inventory.

Floodplain – This is a coverage of the 100year floodplains.

<u>Group 1 Sites</u> – These are sites that show elevated levels of contaminants and are not within the priority one areas.

<u>Inorganic Priority Area</u> – Priority one areas where greater than 25% of the wells/springs show constituents higher than primary standards or other health standards.

<u>Landfill</u> – Areas of open and closed municipal and non-municipal landfills.

<u>LUST (Leaking Underground Storage Tank)</u> – Potential contaminant source sites associated with leaking underground storage tanks as regulated under RCRA.

<u>Mines and Quarries</u> – Mines and quarries permitted through the Idaho Department of Lands.)

<u>Nitrate Priority Area</u> – Area where greater than 25% of wells/springs show nitrate values above 5mg/l.

NPDES (National Pollutant Discharge Elimination System)

 Sites with NPDES permits. The Clean Water Act requires that any discharge of a pollutant to waters of the United States from a point source must be authorized by an NPDES permit.

Organic Priority Areas – These are any areas where greater than 25 % of wells/springs show levels greater than 1% of the primary standard or other health standards.

Recharge Point – This includes active, proposed, and possible recharge sites on the Snake River Plain.

RICRIS – Site regulated under **Resource Conservation Recovery Act (RCRA)**. RCRA is commonly associated with the cradle to grave management approach for generation, storage, and disposal of hazardous wastes.

SARA Tier II (Superfund Amendments and Reauthorization Act Tier II Facilities) – These sites store certain types and amounts of hazardous materials and must be identified under the Community Right to Know Act.

Toxic Release Inventory (TRI) – The toxic release inventory list was developed as part of the Emergency Planning and Community Right to Know (Community Right to Know) Act passed in 1986. The Community Right to Know Act requires the reporting of any release of a chemical found on the TRI list.

<u>Closed Or Open UST (Underground Storage Tank)</u> – Potential contaminant source sites associated with underground storage tanks regulated as regulated under RCRA.

<u>Wastewater Land Applications Sites</u> – These are areas where the land application of municipal or industrial wastewater is permitted by DEQ.

<u>Wellheads</u> – These are drinking water well locations regulated under the Safe Drinking Water Act. They are not treated as potential contaminant sources.

NOTE: Many of the potential contaminant sources were located using a geocoding program where mailing addresses are used to locate a facility. Field verification of potential contaminant sources is an important element of an enhanced inventory.

Where possible, a list of potential contaminant sites unable to be located with geocoding will be provided to water systems to determine if the potential contaminant sources are located within the source water assessment area.